

REPORT ON MACHINERY.

Loc. No. 69 269
SAT. JAN 12 1907
FRI. DEC 7 1906

Port of London.

Received at London Office

No. in Survey held at _____ Date, first Survey Sep 19 Last Survey Nov 23rd 1906
 Reg. Book. _____ (Number of Visits 7)
54 on the St No 91 Goolle S. B. Co Margaret Gross 297
 Master _____ Built at Goolle By whom built Goolle S. B. Co Net 117
 Engines made at St Yarmouth By whom made Crabtree & Co Ltd No 2914 when made 1906
 Boilers made at Shields By whom made J. T. Blttingham when made 1906
 Registered Horse Power _____ Owners Lancashire Steam Fishing Co Port belonging to Fleetwood
 Nom. Horse Power as per Section 28 86 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple expansion & bonding No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 13 1/2 22 1/2 & 37 Length of Stroke 24 Revs. per minute 100 Dia. of Screw shaft 7 3/4 as per rule 7.63 Material of screw shaft steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes Is the after end of the liner made water tight
 in the propeller boss ✓ If the liner is in more than one length are the joints burned ✓ If the liner does not fit tightly at the part
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive ✓ If two
 liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 3'-9"
 Dia. of Tunnel shaft 6.69 as per rule 7.41 Dia. of Crank shaft journals 7.3 as fitted 7.3 Dia. of Crank pin 7 3/8 Size of Crank webs 10 1/2 x 6 Dia. of thrust shaft under
 collars 7 3/8 Dia. of screw 4'-6" Pitch of Screw 12'-0" No. of Blades 4 State whether moveable no Total surface 33 1/2
 No. of Feed pumps 2 Diameter of ditto 2 1/2 Stroke 12 Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 2 1/2 Stroke 12 Can one be overhauled while the other is at work yes
 No. of Donkey Engines 2 Sizes of Pumps 6 x 7 x 7 & 4 1/2 x 3 x 5 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 3, one 2", one 2 1/2", one 3" In Holds, &c. Three 2 1/2" one to each hold
well, one to hold and ejector suction from Eng from bilge hold
 No. of Bilge Injections 1 sizes 4" Connected to condenser, or to circulating pump no Is a separate Donkey Suction fitted in Engine room & size yes 2 1/2"
 Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible 0
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Discharge Pipes above or below the deep water line above
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes
 What pipes are carried through the bunkers hold suction How are they protected wood casing
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes
 Dates of examination of completion of fitting of Sea Connections 19 10 06 of Stern Tube 19 10 06 Screw shaft and Propeller 19 10 06
 Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door — worked from —

BOILERS, &c.—(Letter for record _____) Manufacturers of Steel _____
 Total Heating Surface of Boilers 1506 1/2 Is Forced Draft fitted _____ No. and Description of Boilers _____
 Working Pressure _____ Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____
 Can each boiler be worked separately _____ Area of fire grate in each boiler _____ No. and Description of Safety Valves to
 each boiler _____ Area of each valve _____ Pressure to which they are adjusted _____ Are they fitted with easing gear _____
 Smallest distance between boilers or uptakes and bunkers or woodwork _____ Mean dia. of boilers _____ Length _____ Material of shell plates
 Thickness _____ Range of tensile strength _____ Are the shell plates welded or flanged _____ Descrip. of riveting: cir. seams
 long. seams _____ Diameter of rivet holes in long. seams _____ Pitch of rivets _____ Lap of plates or width of butt straps
 Per centages of strength of longitudinal joint _____ Working pressure of shell by rules _____ Size of manhole in shell _____
 Size of compensating ring _____ No. and Description of Furnaces in each boiler _____ Material _____ Outside diameter _____
 Length of plain part _____ Thickness of plates _____ Description of longitudinal joint _____ No. of strengthening rings _____
 Working pressure of furnace by the rules _____ Combustion chamber plates: Material _____ Thickness: Sides _____ Back _____ Top _____ Bottom _____
 Pitch of stays to ditto: Sides _____ Back _____ Top _____ If stays are fitted with nuts or riveted heads _____ Working pressure by rules _____
 Material of stays _____ Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ End plates in steam space: _____
 Material _____ Thickness _____ Pitch of stays _____ How are stays secured _____ Working pressure by rules _____ Material of stays _____
 Diameter at smallest part _____ Area supported by each stay _____ Working pressure by rules _____ Material of Front plates at bottom _____
 Thickness _____ Material of Lower back plate _____ Thickness _____ Greatest pitch of stays _____ Working pressure of plate by rules _____
 Diameter of tubes _____ Pitch of tubes _____ Material of tube plates _____ Thickness: Front _____ Back _____ Mean pitch of stays _____
 Pitch across wide water spaces _____ Working pressures by rules _____ Girders to Chamber tops: Material _____ Depth and
 thickness of girder at centre _____ Length as per rule _____ Distance apart _____ Number and pitch of stays in each _____
 Working pressure by rules _____ Superheater or Steam chest; how connected to boiler _____ Can the superheater be shut off and the boiler worked
 separately _____ Diameter _____ Length _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet
 holes _____ Pitch of rivets _____ Working pressure of shell by rules _____ Diameter of flue _____ Material of flue plates _____ Thickness _____
 If stiffened with rings _____ Distance between rings _____ Working pressure by rules _____ End plates: Thickness _____ How stayed _____
 Working pressure of end plates _____ Area of safety valves to superheater _____ Are they fitted with easing gear _____

VERTICAL DONKEY BOILER— Manufacturers of Steel

No. _____ Description _____

Made at _____ By whom made _____

Working pressure tested by hydraulic pressure to _____ Date of test _____ When made _____ Where fixed _____

Valves _____ No. of Safety Valves _____ Area of each _____ Pressure to which they are adjusted _____ No. of Certificate _____ Fire grate area _____ Description of Safety _____

If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____ Date of adjustment _____

Material of shell plates _____ Thickness _____ Range of tensile strength _____ Dia. of donkey boiler _____ Length _____

Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____ Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Plates _____

Working pressure of shell by rules _____ Thickness of shell crown plates _____ Radius of do. _____ No. of stays to do. _____ Dia. of stays _____

Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Working pressure of furnace by rules _____ Thickness of furnace crown plates _____ Stayed by _____

Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____ Dates of survey _____

SPARE GEAR. State the articles supplied:— Two each top and bottom end connecting rod bolts and nuts, two main bearing bolts and nuts, one set coupling bolts and nuts, one set feed and bilge pump valve and a quantity of assorted bolts, nuts and stud iron.

The foregoing is a correct description,

Manufacturer. *J. J. Jones*

Dates of Survey while building: During progress of work in shops— 1906 Sep 19, Oct 5, 25, 30, Nov 9, 21, 23
 During erection on board vessel— Hull: 1906— Oct. 12, 19, 20, 14, 16, 17, 21, 22, 23, 24, 27, 30, Dec. 1, 4, 7, 8, 10, 11, 28, 29, 1907— Jan 1, 2, 3, = 22
 Total No. of visits 7

Is the approved plan of main boiler forwarded herewith *yes*

Dates of Examination of principal parts— Cylinders *Oct 5th* Slides *Oct 5th* Covers *Oct 5th* Pistons *Oct 5th* Rods *Oct 5th*
 Connecting rods *Oct 5th* Crank shaft *Oct 5th* Thrust shaft *19.10.06* Tunnel shafts *19.10.06* Screw shaft *12.10.06* Propeller *19.10.06*
 Stern tube *Oct 5th* Steam pipes tested *7.12.06* Engine and boiler seatings *14.11.06* Engines holding down bolts *2.1.07*
 Completion of pumping arrangements *8.1.07* Boilers fixed *2.1.07* Engines tried under steam *6.1.07*
 Main boiler safety valves adjusted *2.1.07* Thickness of adjusting washers *3/16" + 1/4"*
 Material of Crank shaft *Steel* Identification Mark on Do. *1749* Material of Thrust shaft *Steel* Identification Mark on Do. *1749*
 Material of Tunnel shafts *Steel* Identification Marks on Do. *1749* Material of Screw shafts *Steel* Identification Marks on Do. *1749*
 Material of Steam Pipes *Solid drawn Copper* Test pressure *400 lbs. 0*

General Remarks (State quality of workmanship, opinions as to class, &c.)

This machinery has been constructed under special survey, the materials & workmanship being of good description.
 The thrust, intermediate, & tail shafting has not been examined at St. Garmouth, the propellers, steam pipes are to be sent direct to Goole from Hull.
 This engine was dispatched before a final examination of the completed engine was made.
 In our opinion this machinery is eligible for classification with record of *HL Club* when the link motion & condensers & general fittings of the engine have been examined & the whole of the machinery fitted on board & seen working under steam.

The amount of Entry Fee £ 1: 0: 0 When applied for, *applied for from London 25/3/07*
 Special Charge for survey of Donkey £ 7: 19: 07
 Donkey Boiler Fee Hull up £ 2: 19: 00 When received, *paid 12/12/06*
 Travelling Expenses (if any) £ 1: 4: 4
 A. J. Barrett, Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute TUES. JAN 15 1907

Assigned + *Lomb, 07*

Incl. cert written 15.1.07



Write 'Sheer Strake' opposite its corresponding letter.

FLAT PL (If Bar GARBOA)

State any thickness way of D Botto

DOUBL

Length and thickness

POOP RAISE BRIDGE FORE LENG

main Plate

Has

FRA

REV

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3

3

3

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Certificate (if required) to be sent to

(The Surveyors are requested not to write on or below the space for Committee's Minute.)